Meredeth Rhoades

rhoadesmeredeth@gmail.com| Wilmington, DE | (302)-652-9078 | linkedin.com/in/merrhoades

EDUCATION

University of Delaware

College of Engineering

Newark, DE

May 2026

Bachelor of Biomedical Engineering Major: *Biomedical Engineering* Minor: *Biomechanical Engineering*

GPA: 3.38

Relevant Coursework: Analytic Geometry & Calculus, General Chemistry, Introductory Biology I, Fundamentals of Physics, Circuits and Signals, Quantitative Cellular Physiology I, Medical Device Design

SKILLS

- Software: JMP Pro 17, Python, Microsoft Office, Mathematica, Origin, Capstone, SolidWorks, Qualysis Track Manager, Freeform
- Languages: English Native, Spanish Intermediate

RELEVANT EXPERIENCE

Wearable Assistive Device Newark, DE

Team Member July 2024 - Present

- Collaborate with team partners to ensure the timely completion of goals at each weekly meeting
- Conduct extensive independent research on current assistive wearable devices and potential areas of improvement
- Design, prototype, and build an assistive device custom-designed for the user

Analysis of the Load on the Achilles Tendon

Newark, DE

Assistant

October 2024 - Present

- Collect motion capture data for healthy individuals using a 12-camera system and in-ground force plates
- Apply a shear wave tensiometer to the participant's Achilles tendon to gauge muscle-tendon loads during movement
- Operate the Qualysis Track Manager program to perform data cleaning and complete the QTM file for MATLAB

Mechanical Testing Device for Lab-Grown Tissue

Newark, DE

Undergraduate Researcher

October 2024 - Present

- Aid in designing a 3D negative mold, tissue holder, and device for cyclic testing
- Laser cut and 3D print models built in SolidWorks

ACTIVITIES

Biomedical Engineering Society

Newark, DE

Memher

Member

August 2023 - Present

February 2024 - May 2024

- Attended club events and meetings to maintain connections with the members
- Participated in interactive presentations and workshops held by local biomedical engineering professionals

Assistive Medical Technologies

Newark, DE

• Design, prototype, and assemble assistive devices for children with disabilities

• Modeled and built a collapsible high chair to stabilize a child with a neuromuscular disability